

**WHAT IS CLAIMED IS:**

1. A device for treating a patient's heart to improve cardiac function, comprising:
  - a. an inflatable partitioning element which has an outer periphery configured to engage inner surfaces of a ventricular chamber of the patient's heart to partition the chamber into a main productive portion and a secondary, non-productive portion; and
  - b. at least one anchoring element configured to secure the inflatable partitioning element within the ventricular chamber.
2. The device of claim 1 wherein the inflatable partitioning element has a proximal face which defines in part the main productive portion of the ventricular chamber.
3. The device of claim 1 wherein the inflatable partitioning element has a distal face which defines in part the secondary non-productive portion of the ventricular chamber.
4. The device of claim 1 wherein a plurality of anchoring elements are provided on the periphery of the inflatable partitioning element.
5. The device of claim 1 wherein at least one anchoring element is connected to the proximal face of the inflatable element.
6. The device of claim 1 wherein the inflatable partitioning element has a distally extending supporting element configured to engage a region of the non-productive portion of the ventricular chamber.

7. The device of claim 6 wherein the distally extending supporting element is inflatable.

8. The device of claim 6 wherein the distally extending supporting element has a distal end and an anchoring element on the distal end.

9. The device of claim 8 wherein the anchoring element on the distal end of the supporting element is configured to engage a region of the non-productive portion of the ventricular chamber.

10. The device of claim 6 wherein the supporting element has a distal extremity which is configured to non-traumatically engage a region of the patient's ventricular wall defining in part the secondary non-productive portion of the heart chamber.

11. The device of claim 6 wherein the supporting element fills a substantial portion of the non-productive portion of the ventricular chamber.

12. The device of claim 1 wherein the supporting element fills the entire non-productive portion of the patient's heart chamber.

13. The device of claim 1 wherein the inflatable partitioning element is at least in part disk shaped.

14. The device of claim 1 wherein the inflatable partitioning element is hollow.

15. The device of claim 1 wherein a connecting hub is provided on a proximal portion of the partitioning element.

16. The device of claim 15 wherein the hub contains a one-way valve to facilitate inflation of the partitioning element.

17. The device of claim 1 wherein the partitioning element is formed of biocompatible polymeric material

18. The device of claim 17 wherein the biocompatible polymeric material is selected from a group consisting of expanded polytetrafluoroethylene, nylon, polyethylene terephthalate, polyester and polyurethane.

19. The device of claim 1 wherein the inflatable partitioning element has an aspect ratio of thickness to diameter of about 1:10 to about 1:2.

20. The device of claim 1 wherein the at least one anchoring element is a hook or a barb.

21. A device for increasing the ejection fraction of a patient's heart chamber, comprising:

- a. an inflatable partitioning element which has an interior configured to receive inflation fluid, which has a peripheral edge and which is configured to partition a ventricular chamber of the patient's heart into a main productive portion and a secondary, non-productive portion; and
- b. a distally extending supporting element configured to engage a region of the non-productive portion of the ventricular chamber.

22. The device of claim 21 wherein the distally extending supporting element is inflatable.

23. The device of claim 22 wherein the inflatable distal extending supporting element has an interior in fluid communication with the interior of the partitioning element.

24. The device of claim 21 wherein partitioning element has a hub on a proximal face thereof.
25. The device of claim 24 wherein the hub has a one way valve configured to deliver inflation fluid to the interior of the partitioning element.
26. The device of claim 21 wherein the distally extending supporting element is configured to non-traumatically engage a region of the non-productive portion of the ventricular chamber.
27. The device of claim 21 wherein the distally extending supporting element is a stem.
28. The device of claim 27 wherein the stem has at least one J-shaped distal extremity.
29. The device of claim 27 wherein the stem has a plurality of J-shaped distal extremities.
30. The device of claim 27 wherein the stem has a distal extremity with an anchoring element configured to secure the stem to a region of the non-productive portion of the ventricular chamber.
31. The device of claim 30 wherein the anchoring element is a coil with a tissue penetrating tip.
32. The device of claim 21 wherein the inflatable partitioning element is at least in part disk shaped.
33. A device for treating a patient's heart to improve the cardiac function thereof, comprising:

- a. an inflatable partitioning means which has an outer periphery configured to engage inner surfaces of a ventricular chamber of the patient's heart to partition the chamber into a main productive portion and a secondary, non-productive portion; and
  - b. at least one anchoring means configured to secure the inflatable partitioning means within the ventricular chamber.
34. The device of claim 33 wherein the inflatable partitioning means is disc shaped.
35. The device of claim 33 wherein the inflatable partitioning means is hollow
36. The device of claim 33 wherein the anchoring means are provided on the outer periphery of the inflatable partitioning means.
37. The device of claim 36 wherein the anchoring means are hooks or barbs.
38. The device of claim 33 including distally extending support means configured to engage a region of the non-productive portion of the ventricular chamber.
39. The device of claim 38 wherein the distally extending support means is configured to non-traumatically engage a region of the patient's ventricular wall defining in part the secondary non-productive portion of the ventricular chamber.
40. The device of claim 38 wherein the distally extending support means is inflatable.
41. The device of claim 38 wherein the distally extending support means is a stem.
42. The device of claim 38 wherein the distally extending support means has a distal end and an anchoring means on the distal end.

43. The device of claim 42 wherein the anchoring means on the distal end of the supporting element is configured to engage a region of the non-productive portion of the ventricular chamber.

44. The device of claim 43 wherein the anchoring means is a coil with a tissue penetrating tip.

45. The device of claim 38 wherein the support means has a distal extremity which is configured to non-traumatically engage a region of the patient's ventricular wall defining in part the secondary non-productive portion of the heart chamber.

46. The device of claim 38 wherein the support means fills a substantial portion of the non-productive portion of the ventricular chamber.

47. A method of treating a patient with congestive heart failure, comprising:

- a. providing a treatment device having an inflatable partitioning element with a peripheral edge and at least one anchoring element;
- b. positioning the treatment device within a ventricular chamber of the patient's heart with the peripheral edge of the partitioning element engaging a wall of the ventricular chamber to partition the chamber into productive and non-productive portions; and
- c. spacing a distal face of the inflatable partitioning element from a region of a ventricular wall defining at least in part the non-productive ventricular chamber.

48. The method of claim 47 wherein the partitioning device includes an distal extending support element which spaces the partitioning.

49. The method of claim 47 wherein the partitioning device is delivered in a deflated configuration and expanded in position within the patient's heart wall.

50. The method of claim 47 wherein the partitioning device is first positioned within an inner lumen of an elongated catheter and the catheter is percutaneously introduced into the patient's vasculature and advanced therein to the patient's heart chamber wherein the reinforced membrane is discharged from the catheter.

51. The method of claim 47 wherein the edge of the partitioning device is secured to the heart wall defining at least in part the heart chamber by the at least one anchoring member provided on the edge of the partitioning device.

52. The method of claim 47 wherein the partitioning device is positioned within a patient's heart chamber to occlude an atrial appendage.

53. A device for increasing the ejection fraction of a patient's heart chamber, comprising:

- a. an inflatable partitioning means which has an interior configured to receive inflation fluid, which has a peripheral edge and which is configured to partition a ventricular chamber of the patient's heart into a main productive portion and a secondary, non-productive portion; and
- b. a distally extending supporting means configured to engage a region of the non-productive portion of the ventricular chamber.

54. The device of claim 53 wherein the distally extending supporting means is configured to non-traumatically engage a region of the non-productive portion of the ventricular chamber.

55. The device of claim 54 wherein the distally extending support means is a stem.

56. The device of claim 55 wherein the stem has at least one J-shaped distal extremity.

57. The device of claim 55 wherein the stem has a plurality of J-shaped distal extremities.

58. The device of claim 53 wherein the supporting means has a distal extremity with an anchoring means configured to secure the support means to a region of the non-productive portion of the ventricular chamber.

59. The device of claim 58 wherein the anchoring means is a coil with a tissue penetrating tip.

60. The device of claim 53 wherein the inflatable partitioning means has a hub with a one-way valve to facilitate introducing inflation fluid to the interior of the inflatable partitioning means.

61. The device of claim 53 wherein the inflatable partitioning means has an aspect ratio of the thickness of the inflatable partitioning means to the diameter thereof is about 1:10 to about 1:2.

62. A method of treating a patient with congestive heart failure, comprising the steps of:

- a. providing a treatment device having an inflatable partitioning element with a peripheral edge and at least one anchoring element;
- b. positioning the treatment device within a ventricular chamber of the patient's heart with the peripheral edge of the partitioning element



engaging a wall of the ventricular chamber to partition the chamber into productive and non-productive portions; and

- c. spacing a distal face of the inflatable partitioning element from a region of a ventricular wall defining at least in part the non-productive ventricular chamber.

63. The method of claim 62 including the step of providing an inflatable supporting element extending distally from the inflatable partitioning element.

64. The method of claim 62 including the steps of delivering the partitioning device in a deflated configuration and inflating the device in position within the patient's heart wall.

65. The method of claim 53 including the step of first positioning the partitioning device within an inner lumen of an elongated catheter and percutaneously introducing the catheter into the patient's vasculature and the step of discharging the device within the patient's heart chamber.

66. The method of claim 65 including the step of securing an outer periphery of the inflatable partitioning device within the patient's heart chamber by the at least one anchoring member provided on the periphery of the partitioning device.

67. A device for treating a patient's heart to improve cardiac function thereof, comprising:

- a. an inflatable partitioning element which has a peripheral edge and which is configured to partition a ventricular chamber of the patient's heart into a main productive portion and a secondary, non-productive portion; and

- b. a supporting element which extends distally from the inflatable partitioning element and which is configured to engage a region of the non-productive portion of the ventricular chamber.
- c. at least one anchoring element configured to secure the inflatable partitioning element within the ventricular chamber.

68. The device of claim 67 wherein an anchoring element is provided on a distal extremity of the distally extending support element.

69. The device of claim 68 wherein the anchoring element is a helical coil with a tissue penetrating distal tip.